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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sang O. Park

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EXAMINER

VAN HANDEL, MICHAEL P

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

06/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/941,837

Applicant(s)

PARK, SANG O.

Examiner

Michael Van Handel

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11,13-22,24-28,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11,13-22,24-28,30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is responsive to an Amendment filed 3/20/2007. Claims 1-6, 8-11, 13-22, 24-28, 30, and 31 are pending. Claims 7, 12, 23, and 29 are canceled.

Response to Arguments

1. Applicant's arguments regarding claims 1, 5, 11, 16, 21, and 25, filed 3/20/2007, have been fully considered, but they are not persuasive.

Regarding claims 5, 11, 16, 21, and 25, the applicant argues that the combination of Kikinis and Alba et al. does not teach changing a shape or color of a cursor when the cursor is positioned within the at least one interactive region and the address of the Internet Web site exists regarding an item within the at least one interactive region. The examiner respectfully disagrees. As noted in the Office Action mailed 10/20/2006, Kikinis discloses linking URLs with regions in television presentations. A varying signal for providing a display on a display monitor is provided, comprising a first region comprising image information for a single frame for the display; and a second region separate from the first region, the second region comprising information relating a visual entity in the display provided by the information in the first region to an Internet Universal Resource Locator (URL). The second region may also comprise information relating the visual entity to a specific position in the single frame display (col. 2, l. 62-67 & col. 3, l. 1-4). Kikinis further discloses enhancing the region related to the URL with a special color, a halo, or an outline (col. 3, l. 5-9, 25-31 & col. 4, l. 2-5, 30-34). When the user

Art Unit: 2623

selects such regions, the linked URL is invoked, which leads to a WEB location providing information related to the region (col. 5, l. 17-25). Kikinis further discloses selecting such regions by manipulating a cursor to touch the region that has the associated URL and actuating a button on a remote (col. 7, l. 57-65 & col. 9, l. 44-53). Thus, Kikinis clearly discloses a way to inform a user that there is a URL associated with a region. Kikinis does not disclose changing a shape or color of a cursor when the cursor is positioned within the at least one interactive region; however, Alba et al. discloses changing the configuration of a pointer/cursor 110 when a user moves a pointer/cursor 110 over a particular portion of a screen (p. 6, paragraph 93 & Figs. 10A, 10B). The examiner acknowledges the applicant's argument that Alba et al. does not teach or suggest changing a shape or color of a cursor when the cursor is positioned within the at least one interactive region and the address of the Internet Web site exists regarding an item within the at least one interactive region; however, the examiner does not rely on Alba et al. to teach that the address of the Internet Web site exists regarding an item within the at least one interactive region. As noted above, Kikinis discloses user-selectable regions of video frames that, when selected, invokes a linked URL, which leads to a WEB location providing information related to the region (col. 5, l. 17-25). Thus, Kikinis discloses positioning a cursor within an interactive region and the address of an Internet Web site exists regarding an item within the interactive region. Alba et al. discloses changing the configuration of a cursor/pointer to indicate alternate or additional information when the cursor/pointer is positioned in a particular location on the screen (p. 6, paragraph 93). As such, the examiner maintains that the combination of Kikinis and Alba et al. suitably teaches changing a shape or color of a cursor when the cursor is positioned

Art Unit: 2623

within the at least one interactive region and the address of the Internet Web site exists regarding an item within the at least one interactive region, as currently claimed.

Further regarding claims **5, 11, 16, 21, and 25**, the applicant argues that there is no suggestion to combine the references. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kikinis discloses enhancing an image related to a URL by a special color, enhanced brightness, or an outline to indicate to a viewer that the entity is associated with a URL (col. 3, l. 27-30 & col. 5, l. 22-25). Kikinis further discloses that other forms of enhancement are possible (col. 5, l. 25-26). User selection of the image is by cursor manipulation and selection with a pointer device (col. 4, l. 49-51; col. 5, l. 26-30; & col. 7, l. 41-47). Kikinis states a need for allowing a viewer to quickly and easily access information in detail about products advertised at a more general level, and about people and things of interest identified in TV transmissions and to provide a user-friendly ability to access the information (col. 2, l. 56-59 & col. 4, l. 56-59). Alba et al. discloses using a cursor to select programs in a program guide to get more information (p. 2, paragraphs 31, 32). Similar to Kikinis, Alba et al. discloses that when the pointer 110 is moved over an area in the program guide, the item may be automatically highlighted with a brighter color to indicate the viewer's location (p. 2, paragraph 34). When the user selects an item in a program guide, a related Internet site may be accessed (p. 4, paragraph 54 & p. 5, paragraphs 71, 72). Alba et al.

Art Unit: 2623

further discloses changing the configuration and shape of the pointer/cursor 110 depending on the location of the pointer/cursor on the screen (p. 6, paragraphs 92, 93). This indicates alternate or additional information to the user (p. 6, paragraph 93). Given the similarity and analogous nature of the references and the motivation set forth in both references to provide a user-friendly interface, the examiner maintains that it be obvious to combine Kikinis and Alba et al.

Still further regarding claims **5, 11, 16, 21, and 25**, the applicant argues that the examiner's conclusion of obviousness is based upon improper hindsight reasoning; however, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Regarding claim **1**, the applicant argues that the combination of Kitsukawa et al. and Alba et al. does not teach changing a shape or color of the cursor when the cursor is positioned within the specific region in which the specific information exists regarding the object within the specific region. The examiner respectfully disagrees. Kitsukawa et al. discloses alerting a user that portions of a video screen containing indicators are interactive. When the user selects an indicator corresponding to an item in which the viewer is interested, advertising information for the item is displayed (col. 7, l. 10-38 & Figs. 5-7). The selection is made with a cursor or pointer (col. 7, l. 25-26). Kitsukawa et al. further states a need to provide innovative and user-friendly access available through a broadcasting system (col. 4, l. 15-24). The examiner addresses the Alba et al. reference above. Given the similarity and analogous nature of the references and the

Art Unit: 2623

motivation set forth in both references to provide a user-friendly interface, the examiner maintains that it be obvious to combine Kitsukawa et al. and Alba et al.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-4, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitsukawa et al. in view of Alba et al.

Referring to claim **1**, Kitsukawa et al. discloses an apparatus for displaying broadcast information of a television, comprising:

- a broadcast service provider transmitting broadcast signals of each broadcast program including region information and specific information for each region (col. 5, l. 32-37), the region information indicating a region whereby specific information exists (col. 7, l. 16-20; col. 8, l. 31-34; & Fig. 5) and the specific information including a plurality of information data relating to an object included within a specific region (col. 9, l. 52-58; col. 10, l. 22-25; & Figs. 6, 7);
- a television receiver for receiving the broadcast signals transmitted from the broadcast service provider, video processing the received broadcast signals and displaying them through a screen, and displaying the specific information of a corresponding region when a user selects a certain region on the screen, wherein

a position of a cursor is moved over the screen in accordance with movement of an indicating device (col. 4, l. 20-24, 49-54; col. 7, l. 21-30; col. 9, l. 52-58 & Figs. 1-3).

Kitsukawa et al. does not disclose that the television receiver changes a shape or color of the cursor when the cursor is positioned within the specific region. Alba et al. discloses changing the configuration of a pointer/cursor 110 when a user moves the pointer/cursor 110 to the edge of a program matrix 108 to indicate to the user that alternate or additional information is available. Fig. 10A, for example, shows a cursor that has changed into an icon indicating that the program matrix 108 may be shifted by an entire page. Alba et al. further states that the configuration of the pointer/cursor is dependent on the location of the pointer/cursor (p. 6, paragraphs 93, 94). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the cursor of Kitsukawa et al. to change configuration depending on the location of the pointer/cursor, such as that taught by Alba et al. in order to provide an unobtrusive, user-friendly interface to available information.

Referring to claims 2 and 3, the combination of Kitsukawa et al. and Alba et al. teaches the apparatus according to claim 1, wherein the television receiver includes:

- a TV controlling means for enabling the user to control TV functions and to select screen regions, wherein the TV controlling means includes a direction key or a track ball for selecting the screen region (Kitsukawa et al. col. 4, l. 46-54);
- a video processing unit for video processing the broadcast signals and the specific information corresponding to each region and for displaying the signals and information on the screen (Kitsukawa et al. col. 5, l. 46-48);

Art Unit: 2623

- a memory unit for storing the region information and the specific information corresponding to each region (Kitsukawa et al. col. 5, l. 44-46); and
- a microcomputer for reading, from the memory unit, the specific information corresponding to the region of the screen selected by the user through the TV controlling means with reference to the region information and for outputting the information to the video processing unit (Kitsukawa et al. col. 6, l. 9-18).

Referring to claim 4, the combination of Kitsukawa et al. and Alba et al. teaches the apparatus according to claim 2, wherein the television receiver further includes an Internet module enabling WEB site information included in the specific information to be read and processed through the screen (Kitsukawa et al. col. 8, l. 55-57).

Referring to claim 30, the combination of Kitsukawa et al. and Alba et al. teaches the apparatus according to claim 1, wherein the television receiver displays a plurality of indexes, each index corresponding to one of the regions having specific information (Kitsukawa et al. col. 10, l. 15-28).

3. Claims 5, 6, 9-11, 13-22, 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of Alba et al.

Referring to claims 5, 6, 11, 13, 14, 16-19, 21, 22, and 25-28, Kikinis discloses a method/receiver of displaying broadcast information of a television, comprising the steps of:

- a broadcast service provider transmitting broadcast signals of each broadcast program including region information and specific information for each region, the specific information including a plurality of information data, including at

least a uniform resource locator (URL), relating to an object included within a specific region (col. 5, l. 34-35; col. 7, l. 14-17; col. 10, l. 45-67; col. 11, l. 1-19; & Figs. 2A-2C, 3A, 3B);

- receiving through a television receiver the broadcast signals transmitted from the broadcast service provider, video processing the received broadcast signals and displaying them through a screen, and storing the region information and the specific information for each region among the broadcast signals (col. 6, l. 33-58 & col. 9, l. 29-35);
- a user operating an indicating means to search a region on the screen and selecting a desired region, wherein the user operating the indicating means includes moving a position of a cursor in accordance with movement of the indicating means and displaying a video image of the region selected by the user or its corresponding specific information (col. 7, l. 57-65; col. 8, l. 1-37; & Figs. 2A-2C).

Kikinis further discloses enhancing an image in the display to indicate to the viewer that the dynamic image is a related region for access for further information (col. 8, l. 54-60). Kikinis does not disclose changing a shape or color of the cursor corresponding to the region of the screen where the cursor is positioned. Alba et al. discloses changing the configuration of a pointer/cursor 110 when a user moves the pointer/cursor 110 to the edge of a program matrix 108 to indicate to the user that alternate or additional information is available. Fig. 10A, for example, shows a cursor that has changed into an icon indicating that the program matrix 108 may be shifted by an entire page. Alba et al. further states that the configuration of the pointer/cursor is

Art Unit: 2623

dependent on the location of the pointer/cursor (p. 6, paragraphs 93, 94). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the cursor of Kikinis to change configuration depending on the location of the pointer/cursor, such as that taught by Alba et al. in order to provide an unobtrusive, user-friendly interface to available information.

NOTE: The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims **9**, the combination of Kikinis and Alba et al. teaches the method according to claim 5, wherein the step of displaying a video image of the region selected by the user or its corresponding specific information includes the step of displaying a video image of a region selected by the user on one side of the screen and displaying corresponding video related information on the rest of the screen (Kikinis col. 8, l. 1-22 & Fig. 2C).

Referring to claim **10**, the combination of Kikinis and Alba et al. teaches the method according to claim 5, wherein the step of displaying a video image of the region selected by the user or its corresponding specific information includes the step of connecting to an Internet WEB site corresponding to the video image of the selected region and displaying a corresponding screen image (Kikinis col. 8, l. 1-22 & Fig. 2C).

Referring to claims **15**, **20**, and **24**, the combination of Kikinis and Alba et al. teaches the method of claims 11, 16, and 21, respectively, further comprising undisplaying the supplemental information from the display screen when a return command is received from the user and redisplaying the image on the display screen (col. 8, l. 8-10).

Art Unit: 2623

4. Claims 8, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis in view of Alba et al. and further in view of Kitsukawa et al.

Referring to claims 8 and 31, the combination of Kikinis and Alba et al. teaches the method according to claims 5 and 16, respectively, wherein the step of the user operating an indicating means to search a region on the screen and selecting a desired region includes the step of the user pressing a selection key on the indicating means to select the region (Kikinis col. 7, l. 56-65). The combination of Kikinis and Alba et al. does not teach the steps of displaying indexes on the regions defined by the region information among the regions of the screen and selecting a desired index from among the displayed indexes. Kitsukawa et al. discloses an advertising mark 720 for display on a screen. Following selection of the advertising mark 720, advertising information 704 corresponding to various items on the screen is superimposed over the program broadcast 702. The user then selects the advertising information for the item they are interested in (col. 10, l. 15-28). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the Kikinis' method of selecting a region in the combination of Kikinis and Alba et al. to include displaying advertising information corresponding to various items on the screen and allowing the user to select which of the items they are interested in, such as that taught by Kitsukawa et al. in order to better target supplemental information to a user's specific interests.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVH


SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER